

Wyoming State Technical Advisory Committee Meeting Minutes September 23, 2014 Casper, Wyoming

Members Present:

1. Matt Hoobler – WY State Engineer Office
2. Dennis Sun – WY Livestock Roundup
3. Steve Jones – Meeteetse CD
4. Mark Hogan – FWS
5. Gregor Goertz – FSA
6. Ian Tator – WG&F
7. Dave Pellatz – Thunder Basin Grassland Ecosystems
8. Jennifer Zygmunt – WDEQ
9. Graham McGaffin – TNC
10. Miles Edwards – WARWS
11. Cheryl Pesika – RD
12. Chuck Schmitt – NRCS
13. Astrid Martinez – NRCS
14. James Bauchert – NRCS
15. Loren Unruh – OR NRCS
16. Beau Sorenson – OR NRCS
17. Brenda Ling – NRCS
18. Andi Meyer – NRCS
19. Casey Sheley – NRCS
20. Mary Schrader – NRCS
21. Theresa Bowen – NRCS
22. Susan Jones – NRCS
23. Chad McNutt – NOAA
24. Bobbie Frank – WACD (via phone)
25. Julie Kraft – Sublette County Weed & Pest (via phone)

Presenters:

1. Astrid Martinez – NRCS
2. Mary Schrader – NRCS
3. Kenny Wolfley – DC Casper Field Office
4. Lisa Ogden – Natrona County Conservation District
5. Roger Stockton – NRCS
6. Aaron Waller – NRCS

Astrid Martinez, Wyoming State Conservationist welcomed State Technical Advisory Committee (STAC) members. Astrid gave a progress review of the new Farm Bill; she gave a brief overview of some of the changes in the new Farm Bill such as the new AGI limitation and the elimination of the 12 month requirement for contract expiration after practice completion. She talked briefly about the Regional partnership and the Veterans (Historically Underserved) as a new priority. She highlighted the new customer service tool kit. Astrid stated that the EQIP program had received over 800 applications and we were able to fund 143 EQIP projects funded

for an estimate total of \$8,954,300. CSP had contracted 98,000 acres, with an original goal of 50,230 acres. She told the members that Wyoming is still working with Arizona for Programs obligation and with Oregon for Easements remediation with a timeline to return authorities to WY, for FA programs August to October and for easements January to March. Astrid mentioned that 5 FRPPs were closed this year (Bear Trap, miller Land and Livestock, Miller Trust, Alexander Family Trust and Wind River Pastoral. She proceeded to introduced Loren Unruh as ASTC-P for Oregon and current easement remediation coordinator and Beau Sorenson DC-NRCS Oregon as the new easement coordinator and that he will be located at the Casper SO for the next 120 days.

Beau Sorenson gave his update. In it he mentioned he will be at the Wyoming State Office for approximately 4 months with the goal being to transfer the easement coordination role to Mary Schrader, ASTC-Programs, at the end of that timeframe. Loren stated that 5 FRPP applications have been closed with 11 still ongoing and working towards a resolution and 3 canceled. This year WY received 2 ALE applications and they are waiting in the cooperative agreement and delegation of authority from NHQ. He stated that there has been some equitable relief on some WRP applications and NHQ is currently reviewing closed WRP files spanning the last 6 years. Loren said progress is being made for delegation of authority to move forward.

Astrid gave an update on the new ACEP under the new Farm Bill. Our FRPP, GRP and WRP were appealed. The new ACEP funding levels is 40-50% of what it was appropriated under the reappeared programs.

Astrid informed the members that Jerry Hattan (retired USDA-NRCS employee), is now and has been since he retired approximately 6 years ago, an Earth Team Volunteer with over 8,000 volunteer hours to date. She stated that the Secretary of Agriculture will be presenting Jerry with the Presidential Award next week in Washington, DC, and that she presented him with an award with the WY Delegation at State Fair.

Astrid outlined new opportunities with partners this year through various programs and out-reach efforts.

Personnel changes: Cheryl Grapes (retired); Mary Schrader, ASTC-Programs; Tomas Kamienski, Wildlife Biologist; currently there are 7 current vacancies (most of which are located in the field offices); Farm Bill Program Specialist (located in the State Office). Astrid told the members she is going to be on a detail to Alabama for 5 weeks, beginning October 8, 2014 and that Dennis Kimberlin (ASTC-Programs, Phoenix, AZ) will be acting STC. Dennis will be arriving in Wyoming on October 7, 2014.

Astrid gave an update on the Sage Grouse funding (EQIP) - \$2 million obligated for Sage Grouse this year. The Regional Conservation Partnership Program received \$400 million allocation with 600 applications received nationwide for a total of \$2.1 billion. Over 200 applications were invited back to submit full proposal. In WY 2 proposals were invited back.

Chuck Schmitt, State Conservation Engineer gave an update on Watershed Rehab: He stated that there is currently 1 major rehab project – Dull Knife Reservoir. He estimated it is a \$4-\$5 million dollar project. He indicated that the dam is failing and it has to be breached. Chuck stated that if the dam were to fail, there are 80 people in peril (potential loss of life). He said that

the dam is considered to be a high hazard structure and that the Interstate highway would be washed out if the dam failed. The dam is located at the North Fork of the Powder River, just north of Kaycee, Wyoming.

Chad McNutt, National Oceanic & Atmospheric Administration (NOAA): (slide presentation attached)

- Proactive approach to managing drought risks & impacts; being better informed; goal is for reduced impacts & costs
- Provide effective drought early warning system
- Developing early warning framework themes
- U.S. Drought Monitor: <http://droughtmonitor.unl.edu/>
- Map slide depicts impacts across the country – lack of water to meet needs (definition of drought)
- Drought assessment groups
- Colorado Drought Status Briefing
- Apalachicola-Chattahoochee-Flint River Basin; Drought assessment webinars
- Science Assessments – 2011 Flood Attribution Study; 2012 Great Plains Drought Attribution Study California Drought Attribution Study; why they start & why they persist so long; effects of El Nino & La Nina
- Central Region 2012; Southern Plains 2011; California 2013 – Drought Assessments
- Seasonal Climate outlook forum – current conditions; forecast, etc. (see southern plains drought slides; studies to determine when the specific areas will come out of drought (climate outlook process
- Drought Monitor 2011 to now (Missouri basin); high temperatures; less moisture
- Monthly Climate & drought webinars; focus on where concerns are highest in “real time”
- States, feds, tribes, private interests (see slide for contacts)
- Managing drought slide “Response to emerging drought conditions” (webinars are posted on YouTube)
- Western Governors Association (supporters of efforts)
- Work with producers by providing workshops; colleges offering educational/study opportunities
- Engaging the preparedness community; developing drought coordinator network; working on preparing a “drought guide”
- NIDIS Pilot Areas (see slide)
- Missouri Basin (Wind River Reservation – working with USGS for relief) National Integrated Drought Info System
- NOAA-USDA MOU – (see slide)
- USDA-NOAA subsidiary agreement (see slide)
- Develop a National soil moisture database
- Aquifer health impact: anybody monitoring that? USGS & states monitor to some extent (driven by cost);
- Monitoring 2014; high numbers indicate high precipitation
- Summer of 2014 highlights
- 2014 El Nino: will likely have an El Nino this year; expect warm winter;
- Anyone can sign up for the NOAA newsletter (contact Chad for information)
- Categorize droughts by LT (long term) & ST (short term); are not categorizing as to specific type of drought any longer.

Mary Schrader, ASTC-Programs: (slide presentation attached)

Overview of 2014 EQIP obligations

- 2014 Landscape initiatives
- Contracting firm from Vermont conducted the energy audit for the On-Farm Energy application – EQIP contract to implement deficiencies identified in the audit
- EQIP – Streambank/Riparian subaccount (see slide); rippling effect is being used (changing water levels); fish passage; streambank erosion; majority in Sheridan & Carbon counties
- Soil health subaccount (see slide) 796 acres treated; clover; buckwheat; peas; turnips; radishes; Green Cover Crops out of Nebraska was the vendor for the seed mix.
- National Water Quality Initiative (NWQI) (see slide) 10 contracts; better use of water; monitoring to see outcome of results
- Greater Sage Grouse, WLFW (see slide); will continue to implement system to benefit nesting efforts; installing escape ramps in tanks; Question from member: Will Sage Grouse program change in the future.... Mary said she does not see requirements of program changing
- AMA – implement windbreaks; snow deposition; soil erosion/wind protection (see slide); primarily in the Cheyenne & Lusk field offices
- CSP – late sign-up; WY is divided into 5 regions (see slides); Change due to 2014 Farm Bill: requirement to have 2 priority resource concerns per land use (instead of 1 as in past years)
- Designated funds (we were not able to spend) were sent back to Washington (for example Ogallala Aquifer Initiative)
- Priority resource concerns
 1. Handout: Comparison of State Resource Concerns to Resource Concerns seen in ProTracts and on the CPA-52 form (see slide)
 2. Grazing lands management /drought management (see handout) (see slide)
 3. Water quality
 4. Irrigation water management
 5. Prevention of the conversion of agricultural lands to non-ag use
 6. Excessive erosion
 7. Streambank/riparian area protection
 8. Fish & wildlife habitat
 9. Forest health
 10. Energy
 11. Soil Health - recommend adding to list of State concerns
- 2013/2014 resource concerns (see slide); irrigation & grazing lands stayed pretty consistent. Resource concerns did not change very much.
- Review of 2014 subaccounts (see slide); will be working with DC's for input on subaccount distribution.

Comment from Committee: Seems like it is trending to a move to establish a state initiative instead of managing it on a county level. Astrid explained that policy doesn't allow us to have county level accounts unless it is a unique situation that's the reason why we move to regional accounts. Question was asked where AFO/CAFO falls under, Mary indicated water quality. Funding in 2015 may be as tight as in 2014 (see handout for Priority areas); Mary asked for input from members as to resource concerns that have most applicability in Wyoming. What subaccounts to reduce or not fund in 2015?

- State Initiatives/subaccounts (covered above)
- Outreach & Education – Mary asked for suggestions for more effective outreach efforts
- Wildlife requirements for 2014 – 5% required for FA - EQIP funds set aside; still a question if it will be on a national or statewide level; (see slide); waiting for additional information/guidance; 16 practices listed as primary practices to benefit wildlife; 42 to 44 practices may be added as secondary practices to benefit wildlife

Lisa Ogden - Natrona County Conservation District: (slide presentation attached)

Kenny Wolfley, DC (Casper Field Office) was available for questions.

- Middle North Platte Watershed & Kendrick Irrigation District
- Impaired waters in Natrona County – WEG has the list
- 5 drainage or rivers
- Selenium – not saline; not salt; not alkali; information coming out this fall; it is a mineral that comes from Cody Shale & is transported thru waterways
- Map (see slide presentation);
- Selenium transport (dissolved from soils & returns to the river through excessive drainage; water flowing back to the tributaries; can travel underground or on water surface; exists in wetlands – can get toxic through collecting & being stagnant
- Mean selenium levels 2001-2013; sample 14 to 18 sites per month; 2 problem areas, construction; sub-divisions; etc.
- Watershed approach – Sampling analysis plan (SAP)
- Essential to have credible water quality data; TMDL – Lisa suggested for anyone interested in getting more information to go to the internet; she talked about fixing it before it gets to the drainage; TMDL implementation plan – goals: restore beneficial uses on the North Platte River and its tributaries by 2024; working with DEQ to possibly get de-listed (selenium load not too high) due to the fact that historically selenium levels have not been considered to be at dangerous levels
- If the North Platte River is delisted, there is potential to limit regulations
- North Platte River Watershed Project Implementation Plan (NPRWPIP); best management practices; upgraded sprinklers; 300 acres of flood irrigation; piping; install canal lining; irrigation scheduling; more frequent water quality sampling; additional water quality sampling sites
- Priority areas (segment 1); main focus is on CAID
- NPRWPIP Accomplishments 2013-2014; 1 cent sales tax could net Conservation District with \$200,000 towards selenium reclamation
- Level 1 watershed study; 90 projects possible if landowners agree
- Watershed management plan
- Proposed projects from level 1 study; can do wetland enhancement however, research is needed before taking that on; rebuilding Bates Creek Dam is a potential project
- Small water projects program through Wyoming Water Development Commission (WWDC); will reimburse up to \$35,000 of project cost; In 2013, 6 projects for \$35,000 each were under taken
- North Platte River Watershed Project Segment 2; grant application submitted 9/2014; still 45% of conservation district is flood irrigated; still a lot of work to be done with numerous landowners interested
- Slide with pictures – habitat; supply, etc.
- Selenium returns to the soil eventually, but is degraded; sitting stationary is a big issue

Roger Stockton, State Agronomist - Soil Health: (slide presentation attached)

- Continued capacity of the soil to function as a vital living ecosystem
- Graphs presentation; composition of undisturbed soil, by volume; composition of compacted soil, by volume; tillage is a compacting factor in soil (resulting in a loss ½ of air & water space)
- Tillage does to the soil; destroys aggregates; compacts the soil; damages soil fungi; plants weed seeds; increases salinity at the soil surface; exposes organic matter to decomposition; reduces habitat for the soil food web
- Do not have a water erosion runoff problem - it is a water infiltration problem
- Soil food web; decaying plant material; feeding off each other; soil textural structure; creating a stable aggregate is the desired result; tillage disrupts ecosystem processes; soils are high calcium; phosphates; essential to have ecology balance system;
- See slide – “Biological” soil biology cycle in soil – important
- Unlock the secrets in the soil – (slide); good soil structure is essential; diverse microbe community keeps pathogens below economic threshold; diverse plant community attracts insects with enough parasites to control pests
- Nutrient cycling; AM & what it does (see slide)
- Evapotranspiration ET (see slide);
- Cover crops (CC); cover crop mixes vs. fallow crops; N=nitrogen
- Managing soil health: maximize diversity of plants in rotation/cover crops; roots are main input of putting carbon back into the soil
- Soil Health Insights: Wheat fallow CT; Wind Erosion Prediction System (WEPS)
- No till wheat fallow
- No till wheat with a cover crop; SWC = soil water content; (reflecting specific measures); OM = organic matter;
- TAKE HOME MESSAGE – cover crops under irrigation; furrow irrigation – Lingle Area – taking fallow out of cover crops; planting multi species cover crops

Aaron Waller, State Economist - Economics of Soil Health: (slide presentation attached)

- NRCS soil health principles
- Review of soil health benefits
- Slide of field (plowed); no cover on this soil; will have to be some reclamation; cost of not having soil health
- Replacement cost varies
- Soil organic matter; adding nutrients benefits soil health
- 2012-2013 cover crop survey – see slide; planting cover crops results in higher yields;
- Be strategic – partial budgeting – Involves getting costs from producers to get an idea what it is costing farmers/producers
- Resource concerns connected to reclaiming soil health; presentation includes several slides of fields that producer reclaimed, i.e., fallow field; forage after wheat
- Benefits highlighted; high elevation site – best to irrigate it; intensive grazed cover crop (CC) under pivot (Photo);
- Best crops to plant in summer and what to plant in winter for best results
- Aaron highlighted an individual producer in their use of putting cows on a section of acreage; managed intensive grazing
- Information on growing Austrian winter peas / Hard Red Winter (HRW) wheat rotation

ROUND TABLE DISCUSSION:

- Astrid mentioned we are coordinating a fall coordination meeting with WY G&F possible in December and will include field visits of projects done with the coordination of WY G&F.
- Steve Jones: soil health/cover crop well founded; glad to see the focus on that
- Outreach suggestion for soil health – Members felt it would be beneficial for District Conservationists (DC) participation in larger extension programs put on by Conservation Districts; attend meetings; range clubs; participate in conservation districts field days; work closely with extension
- Don't forget rangeland issues (Dave Pellatz); focus on that as well; focus on range health as well as soil health;
- More education & outreach – publish articles in Round Up; focus on issue concerning rangeland vs soil health (order of importance)
- At extension education days, show before & after pictures (highlight success stories) or plan on farm tours to showcase soil health current projects with producers
- Constructing billboards along highways focusing/highlighting local projects; NRCS & conservation district partnering (success stories)
- Ian Tator (G&F) – briefly discussed declining wildlife issues – focus on mule deer herd units; get public input; work intensively in areas to change trajectory of specific mule deer herds issues such as predators, habitat, hunting season effects. He said their goal is to bring the mule deer population back to acceptable levels. They are studying current causes for the decline such as: early successional habitat; conversion of areas to non-ag uses; invasive species; and drought. Ian indicated his agency is working on transitioning summer habitats to winter habitats; formulating an easement outreach plan to benefit sage grouse and mule deer; and are looking to benefit more species
- FSA –Gregor Goertz informed the committee that they are in the process of training for new a program roll out. He expects signups for that in December. CRP – general sign-up next spring; CRP maintenance this summer; haying used extensively as maintenance practice;
- Astrid asked the members for their input in prioritizing resource concerns. She asked that they provide their ideas/suggestions to Mary Schrader.

After no further discussion, Astrid thanked the members for their attendance and participation at the meeting.

Meeting was adjourned at 3:10 p.m.